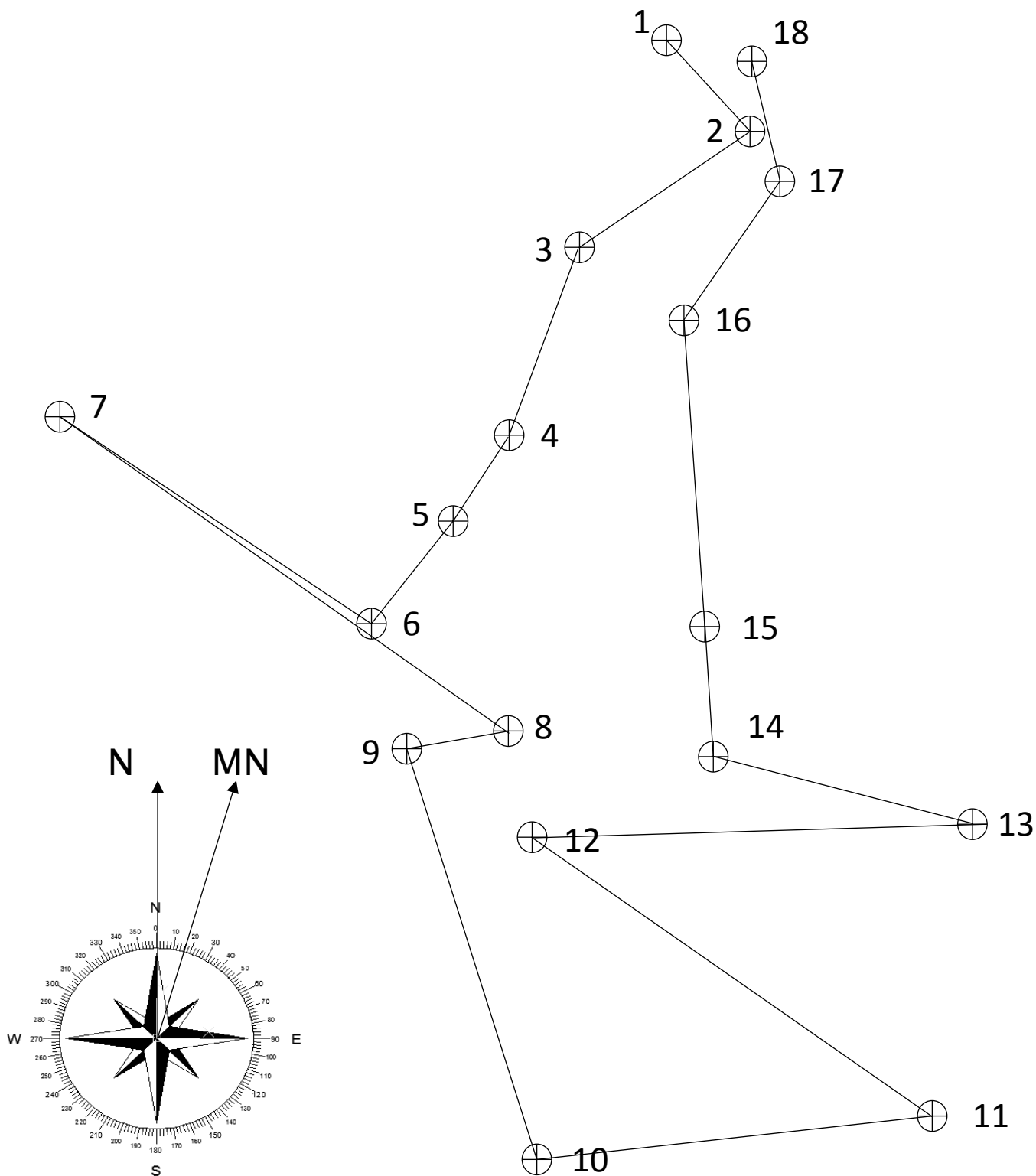


Lake Wilderness Compass Course



Eagle Scout Project
Austin Bills
Troop 515
August 2014

PARTICIPANT WORKSHEET

Lake Wilderness Park Compass Course

Compass Point Identifier Work Sheet

This sheet is intended to be your worksheet where you record the bearing and measured / calculated distance between waypoints.

1) Record the bearing and distance of each waypoint you are going to.

2) After each waypoint is found, record the object it was found next to or attached to.

Points	Bearing (degrees)	Distance (feet)	Point Location	landmark at point				
1 to 2			1	Sign in parking lot near lodge to...				
2 to 3			2					
3 to 4			3					
4 to 5			4					
5 to 6			5					
6 to 7			6					
7 to 8			7					
8 to 9			8					
9 to 10			9					
10 to 11			10					
11 to 12			11					
12 to 13			12					
13 to 14			13					
14 to 15			14					
15 to 16			15					
16 to 17			16					
17 to 18			17					
18 to 1			18					

LEADER INFORMATION SHEET

Lake Wilderness Park Compass Course

Compass Point Identifier Work Sheet

This sheet is intended to be the answers for the worksheet where you record the bearing and measured / calculated distance between waypoints.

1) Record the bearing and distance of each waypoint you are going to.

2) After each waypoint is found, record the object it was found next to or attached to.

Points	Bearing (degrees)	Distance (feet)	Point Location	landmark at point					
1 to 2	136	164	1	Sign in parking lot near lodge to telephone pole anchor point					
2 to 3	234	275	2	Between two trees near kiosk along trail on West edge of park					
3 to 4	198	300	3	Side of post on doggie doo-doo pick-up station					
4 to 5	211	152	4	Edge of parking lot near trees and grass park area					
5 to 6	217	195	5	Straight ahead, across the road and behind the chainlink fence					
6 to 7	298	543	6	West to the park entrance sign. Marker on sign post.					
7 to 8	126	797	7	East to handicap parking sign in parking lot. Marker on sign					
8 to 9	261	158	8	Marker near score board and behind chainlink fence					
9 to 10	164	626	9	East to far parking lot fence. Marker on fence post					
10 to 11	86+	580	10	North to boat ramp. Marker on doggie doo-doo post by kiosk					
11 to 12	309	713	11	East to restroom. Marker on north wall					
12 to 13	90	645	12	North to fishing area. Marker on doggie doo-doo post					
13 to 14	2	392	13	Southwest to bridge. Marker on bridge post					
14 to 15	357	183	14	West toward picnic shelter #2. Marker on North corner of roof					
15 to 16	349	452	15	West corner of building by statue. Marker on building corner					
16 to 17	29	250	16	Northwest to pump house. Marker on roof edge					
17 to 18	345	180	17	Northwest to end of trail. Marker on fence post near grass					
18 to 1	284	124	18	West to starting point at parking lot sign					

Map Orientation Instructions

1) How to Orientate a Map:

- a) Rotate dial on compass to 0 degrees. This is north on the compass (N)
- b) Lay map on board or flat surface with no nails or metal.
- c) Lay compass on map with edge of compass base on True North line of Map.
- d) Hold compass and map to board firmly. Then rotate Map, Compass & Board until red magnetic compass arrow is at 16 degrees.
- e) Map is now orientated.
- f) If the map and surface the map is resting on move's even the slightest, you must start over to insure accuracy of orientation.

2) How to get Bearing or Direction from Map:

- a) Hold orientated map and board down without moving them.
- b) Lay edge of compass between compass points (From point you are at to point you are going to).
- c) Hold everything steady and rotate the dial only until red magnetic compass arrow points to 16 degrees declination.
- d) Read bearing at top of compass.
- e) Write bearing down on paper.

3) How to get Distance from Map between Compass Points:

- a) Lay copy of scale from map, between compass point you are at and compass point you are going to. You may want to cut it out.
- b) Determine how many feet that is.
- c) Now determine how many paces that is by doing the following.
 - a) If 4 paces per 10 feet use $(.4 \times \text{ft})$ to equal how many paces to travel.
So 100 ft would equal 40 paces.
 - a) If 5 paces per 10 feet use $(.5 \times \text{ft})$ to equal how many paces to travel.
So 100 ft would equal 50 paces.

4) How to walk Bearing and Distance to next Point:

- a) Make sure bearing from step 2 is on compass.
- b) Put compass on board or palm of hand and rotate hand or board with compass until red compass arrow points to 21 degrees declination.
- c) At that exact time look yourself or have someone else look to where the compass is pointing, find object in distance to walk towards and focus on while walking correct amount of paces.
- d) Walk the number of paces figured in step 3.
- e) At this point lay down a cloth or something to mark your point while you search for the compass marker.
- f) Search and find the compass point marker.
 - a) If distance between points is about 100 feet, you could be 10 to 20 feet away.
 - b) If distance between points is about 500 feet, you could be 50 to 100 feet away.
 - c) You may have done really well and be standing next to the marker
 - d) Markers will be attached to wood posts, or attached to the side of an existing structure, just look around.

Lake Wilderness Park Compass Course

Hello, and welcome to the Lake Wilderness Compass Course. We hope you enjoy this course.

Course Specifications:

1. The course is 6,729 feet long, 1.27 miles.
2. There are 19 compass markers in the park. You will start at point 1, and navigate to point 18, point 19 being the starting position in the parking lot on the kiosk.
3. You will be in short grass and long grass, so wear appropriate clothing.
4. This course will take approximately 1 to 2 hours depending on your ability and skill.
5. At no point will there be any need to enter the lake, river, or marshy areas.
6. There will be a need to cross the road in a few places, so a responsible adult must always supervise this activity.

Gear needed for this course:

1. Compass with plastic base (should be marked in 2 degree increments, no less, or you will have a large margin of error when looking for compass points).
2. Map of all the compass points.
3. Pencil
4. Flat Board for map to lay level on. This will keep map from getting wet in the grass. If it is raining the map ink may smear. Board cannot contain any metal in it or around it, this will make the compass inaccurate and give you a false reading.
5. Paper with copy of the Scale from map. (Make from the map, This will help you determine the distance to travel between points).
6. Item 2 from "Gear for Leader" list, if there is no leader.

Gear for Leader:

1. Copy of the sheet that shows all of the compass point locations and bearings to those points. This is NOT to be given to the person doing the compass course.
2. Instruction sheet on how to Orientate a Map, How to get Bearing or Direction from Map, How to get distance from Map between Compass Points, and How to walk Bearing and Distance to next Point. (If there is no leader, this could self teach someone how to use the course).

Thank you to the staff of Lake Wilderness Park for allowing this compass course in the park.